CITY OF LEON VALLEY

GRASS HILL ELEVATED STORAGE TANK PAINTING AND REHABILITATION BEXAR COUNTY BID NO. 2020-05



Know what's **below.**Call before you dig.

THE LONE STAR NOTIFICATION COMPANY AT 1-800-669-8344

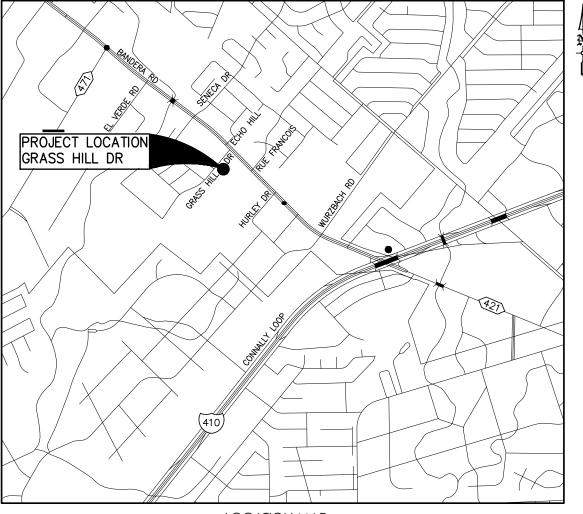
SHEET INDEX

SHEET NO. **DESCRIPTION** COVER SHEET C1

C2 GENERAL NOTES

C3 OVERALL SITE LAYOUT

C4 TANK EXTERIOR AND INTERIOR UPGRADES



LOCATION MAP SCALE: 1" = 5000'





TBPELS REGISTERED FIRM NO. ENGINEERING FIRM F-366 SURVEYING FIRM 10126501

TBAE REGISTERED FIRM NO. ARCHITECTURAL FIRM BR599

7500 RIALTO BLVD, BUILDING 1, SUITE 240

PH. (512) 381-8333

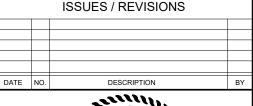
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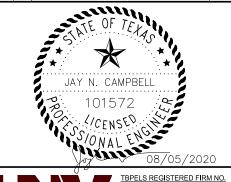


TANK REHABILITATION GENERAL:

- 1. LEON VALLEY HAS RIGHT OF FIRST REFUSAL ON ANY SALVAGED EQUIPMENT. CONTRACTOR TO COORDINATE WITH LEON VALLEY INSPECTOR ON DELIVERY OF SALVAGED EQUIPMENT TO OTHER LEON VALLEY FACILITIES. SHOULD LEON VALLEY NOT WANT TO RETAIN SALVAGED EQUIPMENT, CONTRACTOR SHALL BE RESPONSIBLE FOR DISPOSAL AT NO ADDITIONAL COST.
- 2. CONTRACTOR TO COORDINATE WITH LEON VALLEY REPRESENTATIVE AND DELIVER ANY SALVAGEABLE MATERIAL TO A FACILITY SPECIFIED, AS REQUIRED BY LEON VALLEY INSPECTORS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE DURING THE REMOVAL AND DELIVERY PROCESS AT CONTRACTORS EXPENSE.
- 4. RESTORE ALL DISTURBED AREAS TO ORIGINAL OR BETTER CONDITION NO SEPARATE PAY ITEM. EXISTING SITE IMPROVEMENTS SHALL BE PROTECTED DURING THE TANK REHABILITATION WORK. ANY AND ALL DAMAGES SHALL BE CORRECTED AND RETURNED TO ORIGINAL (PRE-CONSTRUCTION) CONDITION TO THE APPROVAL OF LEON VALLEY AND THE ENGINEER.
- CONTRACTOR MUST KEEP VEHICLES AND EQUIPMENT WITHIN LIMITS OF SITE. CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SECURITY. COORDINATE WITH INSPECTOR JOHN KONZEN 512-422-7655.
- CONTRACTOR SHALL TAKE NECESSARY MEASURES TO AVOID FUGITIVE BLAST DEBRIS FROM ENTERING DRAINAGE STRUCTURES.
- 7. CONTRACTOR SHALL REPLACE ALL EXISTING LABELS AND SIGNS CURRENTLY ON THE TANK AFTER PAINTING OPERATIONS ARE COMPLETE, NO SEPARATE PAY ITEM.
- 8. EXISTING VALVES MAY LEAK TO INTERIOR OF TANK. CONTRACTOR SHALL REQUEST APPROVAL FROM ENGINEER AND OWNER BEFORE TAKING MEASURES TO CONTROL WATER AS REQUIRED FOR INTERIOR WORK.
- CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING RESIDUAL WATER LEFT IN TANK AFTER INITIAL TANK DRAINING. NO SEPARATE PAY ITEM.
- CONTRACTOR SHALL DISPOSE OF ALL SEDIMENT LEFT IN TANK AFTER INITIAL TANK DRAINING AT AN APPROVED LAND FILL OR AS DIRECTED BY THE ENGINEER. NO SEPARATE PAY ITEM.
- 11. REMOVE ANY EXISTING FREEZE PROTECTION ON EXTERIOR VALVES & PIPES AND REPLACE SUBSEQUENT TO EXTERIOR COATINGS. NO SEPARATE PAY ITEM.
- 12. CONTRACTOR IS RESPONSIBLE FOR REMOVING & REINSTALLING EXISTING ANTENNAS ON TOP OF THE EST AS NEEDED FOR BLASTING AND COATING WORK. CONTRACTOR SHALL COORDINATE WITH NORTH SIDE INDEPENDENCE SCHOOL & OWNER OF RADIO EQUIPMENT FOR REQUIREMENTS OF ADVANCE NOTIFICATION AND DETERMINATION OF SPECIFIC REQUIREMENTS OF OWNER. CONTRACTOR SHALL PROVIDE ESTIMATED DOWN TIME OF ANTENNA IN ADVANCE, CONTACT KELLEY FRYAR AT (210) 397-5661. NO SEPARATE PAY ITEM FOR THIS WORK.
- 13. ACCESS ROAD AND DRIVEWAY DAMAGED DURING CONSTRUCTION SHALL BE REPLACED AS DIRECTED AND APPROVED BY LEON VALLEY AND THE ENGINEER. NO SEPARATE PAY ITEM.
- 14. OWNER DOES NOT GUARANTEE WATERTIGHT SHUTDOWN FROM ALL EXISTING VALVES. CONTRACTOR IS REQUIRED TO ACCOMMODATE LEAKAGE AS NECESSARY TO PERFORM REQUIRED WORK AT NO ADDITIONAL COST TO OWNER.
- 15. PROVIDE CONDUCTOR SUPPORT FITTINGS FOR SUPPORTING OF CONDUCTORS IN VERTICAL CONDUIT OR CABLE RUNS AS PER NEC ARTICLE 300.19.
- 16. ALL NUTS AND BOLTS USED MUST HAVE AN ANTI-SEIZE COMPOUND APPLIED. GASKETS SHALL BE 1/8-INCH, CLOTH-INSERTED RUBBER CORROSIVE ACID AND ALKALI FREE FOR POTABLE WATER CONFORMING TO ANSI B16.21-92 AND AWWA C207-07. FLAT FACED FLANGES SHALL REQUIRE FULL-FACED GASKETS. RAISED FACE FLANGES SHALL REQUIRE FLAT RING GASKETS.
- 17. CONTRACTOR SHALL REFER TO THE TECHNICAL SPECIFICATIONS FOR THE PREPARATION REHABILITATION, AND PAINTING OF THE EXTERIOR AND INTERIOR OF THE TANK AND APPURTENANCES. SEE TECHNICAL SPECIFICATION SECTION TS.
- 18. REGARDING BID ITEM NO. 10, FOR THE NEW CITY ANTENNA CONDUIT, DISCONNECT THE WIRING AT THE J-BOX LOCATED AT THE BASE OF THE LADDER LEG AND REMOVE BOTH EXISTING CONDUIT AND ELECTRICAL WIRING FROM THE TANK THAT RUNS UP THE LEG LADDER AND DEMO. INSTALL NEW RUN OF 1-INCH DIA. CONDUIT FROM THE J-BOX AT GROUND LEVEL UP TO THE BALCONY PLATFORM AND TERMINATE AT NEW J-BOX. PULL NEW RUN OF ELECTRICAL WIRING THROUGH CONDUIT AND TERMINATE INSIDE J-BOX.

tem No.	Item Description	Est. Qnty.	Unit
1	Furnish all materials, equipment, labor, superintendence and incidental work to abrasive blast per SSPC-SP6, clean, prime and coat with Containment and Dust Collection the Exterior of the existing 150,000-gallon EST, all appendages, ladder, vent, hatch, railing, tank piping, valves, etc., as indicated on the drawings and specifications part 2.04.A and part 3.07 except where specifically covered by other bid items.	1	L.S.
2	Furnish all materials, equipment, labor, superintendence and incidental work to spot blast for inspection and identification of repairs, abrasive blast per SSPC-SP10, clean, prime, stripe coat and coat with Dehumidification the Interior of the existing 150,000-gallon EST, all appendages, ladder, vent, hatch, weir box, etc., as indicated on the drawings and specifications part 2.04.B and part 3.06 , except where specifically covered by other bid items.		L.S.
3	Furnish all materials, equipment, labor, superintendence and incidental work to Dehumidify the interior of the existing 150,000-gallon EST, during surface preparation and coating, including hoses, filters, etc., as indicated on the drawings and specifications part 3.06 , except where specifically covered by other bid items.	1	L.S.
4	Furnish all materials, equipment, labor, superintendence and incidental work to provide Containment and Dust Collection as indicated on the drawings and specifications part 3.07 , except where specifically covered by other bid items.	1	L.S.
5	Furnish all materials, equipment, labor, superintendence and incidental work to perform General Repairs ; grinding, welding and general work to		M.H.
6	Furnish all materials, equipment, labor, superintendence and incidental work to install a 20" AWWA approved aluminum Roof Vent, including a new weld-on C.S. flanged neck to accommodate the bolt on installation of the new aluminum vent, as indicated on the drawings and specifications except where specifically covered by other bid items. Provide drawing with P.E. seal for submittal.	1	L.S.
7	Furnish all materials, equipment, labor, superintendence and incidental work to perform Interior and Exterior ladder replacement , balcony midrailing modifications and rendering all OSHA Compliant as indicated on the drawings and specifications, except where specifically covered by other bid items.	1	L.S.
8	Furnish all materials, equipment, labor, superintendence and incidental work to install a New Riser Manway 18"x24" oval or 24" diameter AWWA D100 approved and TCEQ compliant as indicated on the drawings and specifications, except where specifically covered by other bid items.		L.S.
9	Furnish all materials, equipment, labor, superintendence and incidental work to perform Caulking and or Seam Sealing work to seams and areas as deemed necessary, as indicated on the drawings and specifications part 3.01.A.2 , except where specifically covered by other bid items.	50	Per Tub
10	Furnish all materials, equipment, labor, superintendence and incidental work to perform removing and reinstalling electrical conduit and antennas (to be re-used) as needed for the tank rehabilitation, and one (1) run of new conduit with electrical from the base of the leg ladder to the top of the balcony to terminate inside the J-box.	1	L.S.





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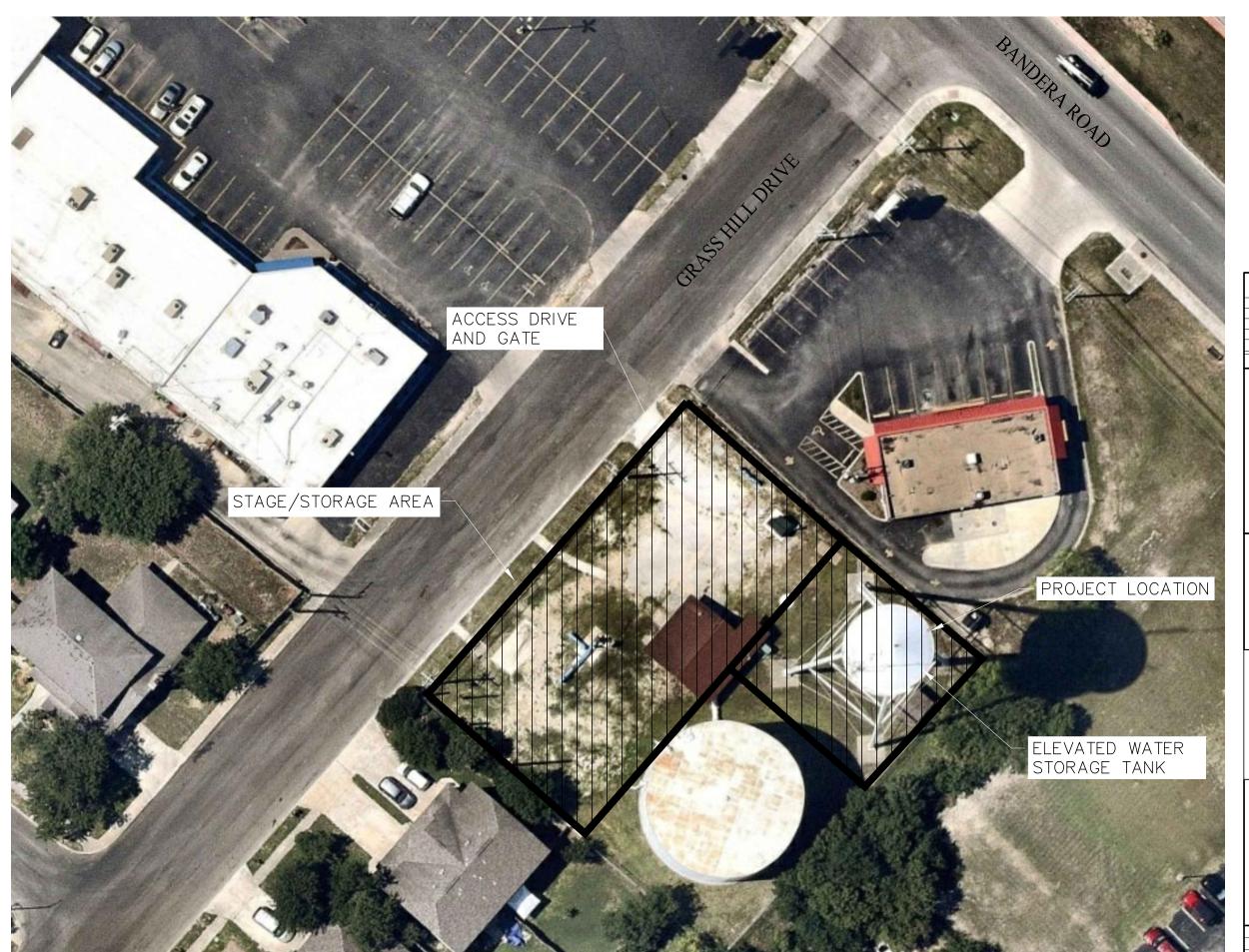
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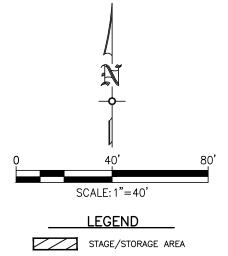


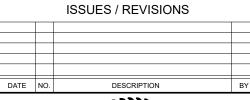
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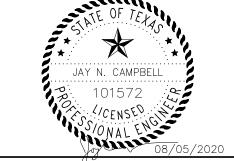
GENERAL NOTES

FED.RD. DIV.NO.	FEDERAL AID PROJECT			SHEET NO.
				2
STATE	DIST.			
TEXAS			INTY	
CONT. SECT.		JOB	HIGHWAY NO.	









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OVERALL SITE LAYOUT

FED.RD. DIV.NO.	FEDERAL AID PROJECT			SHEET NO.
				3
STATE	DIST.			
TEXAS			BEXAR COL	INTY
CONT.	SECT.	JOB HIGHWAY NO.		IWAY NO.

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TANK INFORMATION

WELDED STEEL TANK
CONSTRUCTED: 1930
TANK VOLUME: 150,000 GST
TANK HEIGHT: 155'
BCL = ±100'

 $TCL = \pm 142'$ SHELL HEIGHT = $\pm 25'$

INTERIOR SURFACE AREA: 5,000 SF EXTERIOR SURFACE AREA: 9,500 SF

EXTERIOR CLEANING AND COATING

FURNISH ALL MATERIALS, EQUIPMENT, LABOR, SUPERINTENDENCE AND INCIDENTAL WORK TO ABRASIVE BLAST PER SSPC—SP6, CLEAN, PRIME & COAT WITH CONTAINMENT AND DUST COLLECTION THE EXTERIOR OF THE TANK, ALL APPENDAGES, LADDER, VENT, HATCH, RAILING, TANK PIPING, VALVES, PER PLANS & SPECIFICATION PART 2.04.A & PART 3.07.

INTERIOR CLEANING AND COATING

FURNISH ALL MATERIALS, EQUIPMENT, LABOR, SUPERINTENDENCE AND INCIDENTAL WORK TO SPOT BLAST FOR INSPECTION & IDENTIFICATION OF REPAIRS, ABRASIVE BLAST PER SSPC—SP10, CLEAN, PRIME, STRIPE COAT & COAT WITH DEHUMIDIFICATION THE INTERIOR OF THE TANK, ALL APPENDAGES, LADDER, VENT, HATCH, WEIR BOX, ETC., PER PLANS & SPECIFICATIONS PART 2.04.B & PART 3.06.

₂ \DEHUMIDIFY

FURNISH ALL MATERIALS, EQUIPMENT, LABOR, SUPERINTENDENCE & INCIDENTAL WORK TO DEHUMIDIFY THE INTERIOR OF THE EXISTING EST, DURING SURFACE PREPARATION & COATING, INCLUDING HOSES, FILTERS, ETC. AS INDICATED ON DRAWINGS & SPECIFICATIONS PART 3.06.

CONTAINMENT AND DUST COLLECTION

FURNISH ALL MATERIALS, EQUIPMENT, LABOR, SUPERINTENDENCE & INCIDENTAL WORK TO PROVIDE CONTAINMENT AND DUST COLLECTION AS INDICATED ON DRAWINGS AND SPECIFICATIONS PART 3.07.

WELDING, GRINDING, AND GENERAL REPAIRS

FURNISH ALL MATERIALS, EQUIPMENT, LABOR, SUPERINTENDENCE AND INCIDENTAL WORK TO PERFORM GENERAL REPAIRS; GRINDING, WELDING AND GENERAL WORK TO REPAIR CORROSION RELATED SURFACES AND REMOVE OR MAKE OPERABLE THE LIQUID TARGET AS DEEMED NECESSARY IN ACCORDANCE WITH SECTION "TECHNICAL SPECIFICATION" PART 3.01.A.

ROOF VENT

FURNISH ALL MATERIALS, EQUIPMENT, LABOR, SUPERINTENDENCE & INCIDENTAL WORK TO INSTALL A 20" DIA. AWWA APPROVED ALUMINUM ROOF VENT, INCLUDING A NEW WELD-ON C.S. FLANGED NECK TO ACCOMMODATE THE BOLT ON INSTALLATIONS OF THE NEW ALUMINUM VENT, AS INDICATED ON DRAWINGS & SPECIFICATIONS.

LADDER & RAILING REPLACEMENT

FURNISH ALL MATERIALS, EQUIPMENT, LABOR, SUPERINTENDENCE & INCIDENTAL WORK TO PERFORM INTERIOR AND EXTERIOR LADDER REPLACEMENT, BALCONY MID—RAILING MODIFICATIONS AND RENDERING ALL OSHA COMPLIANCE AS INDICATED ON DRAWINGS & SPECIFICATIONS.

RISER MANWAY

FURNISH ALL MATERIALS, EQUIPMENT, LABOR, SUPERINTENDENCE & INCIDENTAL WORK TO INSTALL NEW RISER MANWAY 18"X24" OVAL OR 24" DIA. AWWA D100 APPROVED & TCEQ COMPLIANCE AS INDICATED ON DRAWINGS & SPECIFICATIONS.

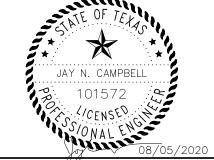
CAULKING & SEAM SEALING

FURNISH ALL MATERIALS, EQUIPMENT, LABOR,
SUPERINTENDENCE & INCIDENTAL WORK TO PERFORM
CAULKING AND/OR SEAM SEALING WORK TO SEAMS & AREAS
AS DEEMED NECESSARY, AS INDICATED ON DRAWINGS &
SPECIFICATIONS Part 3.01.A.2.

ANTENNA REMOVAL & REPLACEMENT

FURNISH ALL MATERIALS, EQUIPMENT, LABOR,
SUPERINTENDENCE & INCIDENTAL WORK TO PERFORM
REMOVING & REINSTALLING ELECTRICAL CONDUIT & ANTENNAS
AS NEEDED FOR TANK REHAB. CONTRACTOR SHALL
COORDINATE WITH NORTH SIDE INDEPENDENT SCHOOL.

		ISSUES / REVISIONS	
DATE	NO.	DESCRIPTION	BY





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				4
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CONT.	SECT.	JOB	JOB HIGHWAY NO.	

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